

Refine Search

Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Search Results -

Terms	Documents
L47 and bill\$	40

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 US Patents Full-Text Database
 US OCR Full-Text Database
 EPO Abstracts Database
 JPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

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Search History

DATE: Thursday, December 09, 2004 [Printable Copy](#) [Create Case](#)

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DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

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<u>L45</u>	455/456	3257	<u>L45</u>
<u>L44</u>	455.clas.	95601	<u>L44</u>

DB=USPT; PLUR=YES; OP=OR

<u>L43</u>	5570412.pn.	1	<u>L43</u>
<u>L42</u>	5960341.pn.	1	<u>L42</u>
<u>L41</u>	6151505.pn.	1	<u>L41</u>
<u>L40</u>	6151505.pn.	1	<u>L40</u>
<u>L39</u>	6272347.pn.	1	<u>L39</u>
<u>L38</u>	6330452.pn.	1	<u>L38</u>

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

<u>L37</u>	L36 and ("call data registers" or "cdr")	1	<u>L37</u>
<u>L36</u>	L35 and ("mobile switching center" or "msc")	14	<u>L36</u>
<u>L35</u>	L34 and ("unstructured supplementary service data" or "ussd")	25	<u>L35</u>
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<u>L28</u>	370.clas.	80078	<u>L28</u>
<u>L27</u>	370/350	1725	<u>L27</u>
<u>L26</u>	370/352	6143	<u>L26</u>
<u>L25</u>	L24 and (payment or bill\$)	6	<u>L25</u>
<u>L24</u>	L23 and (www or internet or network)	15	<u>L24</u>
<u>L23</u>	l17 and (e-mail or electronic near message)near address	15	<u>L23</u>
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<u>L21</u>	l17 and (e-mail or electronic near message)	46	<u>L21</u>
<u>L20</u>	L19 and (e-mail or electronic near message)	1	<u>L20</u>
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<u>L18</u>	L17 and message	282	<u>L18</u>
<u>L17</u>	digital near mobile near telephone	856	<u>L17</u>
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<u>L15</u>	(telephony or telecommunication) near (payment or bill\$)	403	<u>L15</u>
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<u>L12</u>	L9 and (id with code or "identification code")	203	<u>L12</u>
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<u>L10</u>	L9 and account near manage\$	95	<u>L10</u>
<u>L9</u>	L8 and data near stor\$	529	<u>L9</u>
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<u>L7</u>	L5 and (telecommunication or digital near mobile near telephony)	1015	<u>L7</u>
<u>L6</u>	L5 and telecommunication	1015	<u>L6</u>
<u>L5</u>	payment and transaction near process\$	4976	<u>L5</u>
<u>L4</u>	705/40	1423	<u>L4</u>
<u>L3</u>	705.clas.	30617	<u>L3</u>
<u>L2</u>	713.clas.	22535	<u>L2</u>
<u>L1</u>	713/200	4625	<u>L1</u>

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L48: Entry 22 of 40

File: USPT

Nov 9, 2004

US-PAT-NO: 6816724

DOCUMENT-IDENTIFIER: US 6816724 B1

TITLE: Apparatus, and associated method, for remotely effectuating a transaction service

DATE-ISSUED: November 9, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Asikainen; Jussi	Tampere			FI

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Nokia Corporation	Espoo			FI	03

APPL-NO: 09/ 473291 [PALM]

DATE FILED: December 28, 1999

INT-CL: [07] H04 M 3/42

US-CL-ISSUED: 455/414.1; 455/41.2

US-CL-CURRENT: 455/414.1; 455/41.2

FIELD-OF-SEARCH: 455/466, 455/557, 455/558, 455/41, 455/414, 455/406, 455/41.1, 455/41.2, 455/566, 455/414.1, 705/34, 705/40

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> 5887266	March 1999	Heinonen et al.	455/558
<input type="checkbox"/> 5917913	June 1999	Wang	308/25
<input type="checkbox"/> 5983208	November 1999	Haller et al.	705/21
<input type="checkbox"/> 6036086	March 2000	Sizer, II et al.	235/375
<input type="checkbox"/> 6067529	May 2000	Ray et al.	705/26
<input type="checkbox"/> 6169890	January 2001	Vatanen	455/406
<input type="checkbox"/> 6195542	February 2001	Griffith	455/406

<input type="checkbox"/> <u>6311042</u>	October 2001	DeSchrijver	455/556
<input type="checkbox"/> <u>6327300</u>	December 2001	Souissi et al.	375/219
<input type="checkbox"/> <u>6405027</u>	June 2002	Bell	257/410
<input type="checkbox"/> <u>6431439</u>	August 2002	Suer et al.	235/380
<input type="checkbox"/> <u>6574314</u>	June 2003	Martino	379/93.17
<input type="checkbox"/> <u>2001/0014615</u>	August 2001	Dahm et al.	455/566

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
WO96/32702	October 1996	WO	
PCT/F198/00250	October 1998	WO	
WO99/31630	June 1999	WO	

ART-UNIT: 2684

PRIMARY-EXAMINER: Vuong; Quochien B.

ASSISTANT-EXAMINER: Nguyen; Tu

ABSTRACT:

A set-top box is equipped with a television and a mobile terminal as well as a bank server connection all connected to each other via Internet, GSM networks, Bluetooth networks or the like. Users can request bank services via mobile phones. After security checks are completed, the user is granted permission to perform a selected banking service. The user can fill out a form or follow menu selection instructions to effectuate the desired service.

20 Claims, 6 Drawing figures

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L12: Entry 176 of 203

File: USPT

Aug 28, 2001

US-PAT-NO: 6282183

DOCUMENT-IDENTIFIER: US 6282183 B1

TITLE: Method for authorizing couplings between devices in a capability addressable network

DATE-ISSUED: August 28, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Harris; Jeffrey Martin	Chandler	AZ		
Woodward; Ernest E.	Chandler	AZ		
Borgstahl; Ronald W.	Phoenix	AZ		
Farnsworth; Dale	Mesa	AZ		
Eaglstun; Jay	Tempe	AZ		
Eckert; Eric Richard	Glendale	AZ		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Motorola, Inc.	Schaumburg	IL			02

APPL-NO: 09/ 104634 [PALM]

DATE FILED: June 25, 1998

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS This application is a CIP of Ser. No. 08/862,311 filed Jun. 02, 1997 now abandoned. This application is related to application Ser. No. 08/729,207, filed on Oct. 15, 1996, now U.S. Pat. No. 6,069,896 application Ser. No. 08/762,127, filed on Dec. 9, 1996 now abandoned; application Ser. No. 08/766,652, filed on Dec. 16, 1996 now U.S. Pat. No. 5,898,821; application Ser. No. 08/774,977, filed on Dec. 26, 1996 now U.S. Pat. No. 5,909,183; and application Ser. No. 08/794,312, filed on Feb. 3, 1997, which are assigned to the same assignee as the instant application.

INT-CL: [07] G01 R 31/08, H04 J 1/16, H04 L 12/28, H04 L 12/40, H04 L 12/42

US-CL-ISSUED: 370/338; 370/230, 370/431, 370/438, 370/449

US-CL-CURRENT: 370/338; 370/230, 370/431, 370/438, 370/449

FIELD-OF-SEARCH: 370/338, 370/438, 370/230, 370/229, 370/235, 370/401, 370/449, 395/384, 395/186, 395/188, 395/491, 395/430, 395/442, 709/227, 709/223, 709/230

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	5077790	December 1991	D'Amico et al.	380/23
<input type="checkbox"/>	5124984	June 1992	Engel	370/94.1
<input type="checkbox"/>	5276680	January 1994	Messenger	370/85.1
<input type="checkbox"/>	5317693	May 1994	Cuenod et al.	395/275
<input type="checkbox"/>	5623637	April 1997	Jones et al.	385/491
<input type="checkbox"/>	5732350	March 1998	Marko et al.	455/435
<input type="checkbox"/>	5809428	September 1998	Garahi et al.	455/517
<input type="checkbox"/>	5920730	July 1999	Vincent	395/834
<input type="checkbox"/>	6003084	December 1999	Green et al.	709/227

ART-UNIT: 264

PRIMARY-EXAMINER: Vu; Huy D.

ASSISTANT-EXAMINER: Phan; M.

ATTY-AGENT-FIRM: Bethards; Charles W. Watanabe; Hisashi D.

ABSTRACT:

A method for bonding (905) to a device (901, 902). The method includes a step of transmitting a beacon message (2500). The method also includes steps of (i) selecting a beacon opcode (2501), (ii) selecting an identifier (2512), (iii) selecting an identifier type (2514), (iii) selecting an identifier address (2516), composing the beacon opcode (2501), the identifier (2512), the identifier type (2514) and the identifier address (2516) into the beacon message (2500). The method also includes a step of receiving, in response to the transmitting step, a make bond message (2530).

18 Claims, 67 Drawing figures

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L16: Entry 34 of 56

File: USPT

Jul 9, 2002

DOCUMENT-IDENTIFIER: US 6418207 B1

TITLE: Method and system for detecting a change in at least one telecommunication rate plan

Detailed Description Text (12):

Processor 126, in communication with the interface unit 124, processes the transaction data by a plurality of rate plans, each rate plan generating a toll amount corresponding to at least one telephone call. Processor 126 then compares the toll amounts from each of the plurality of rate plans to determine a lowest toll amount. Processor 126 deducts an amount x from the lowest toll amount to form a final toll amount, and generates the billing record for at least one of a plurality of subscribers based on the final toll amount.

Detailed Description Text (15):

FIG. 3 presents a block diagram representation of the operation of a processor in accordance with one embodiment of the present invention. In particular, the operation of processor 126 is represented. Processor 126 processes the transaction data by a plurality of rate plans 132, each rate plan 132 generating a toll amount corresponding to at least one telephone call. Processor 126 then uses comparator 134 to compares the toll amounts from each of the plurality of rate plans 132 to determine a lowest toll amount. Processor 126 uses summing block 136 to deduct an amount x from the lowest toll amount to form a final toll amount that can be used to generate the billing record for at least one of a plurality of subscribers based on the final toll amount.

Detailed Description Text (39):

While the term day of week has been used throughout description above, it should be recognized that telecommunication billing systems traditionally segregate days of the week only by the categories: holidays, Saturdays, Sundays, and other days of the week. However, more sophisticated segregation is possible as will be recognized by one of ordinary skill of the art.

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L16: Entry 35 of 56

File: USPT

Apr 16, 2002

DOCUMENT-IDENTIFIER: US 6373929 B1

TITLE: Bidding for telecommunications traffic

Brief Summary Text (17):

The technology required to facilitate forward delivery transactions, in which a buyer and seller agree to the terms of a transaction today, for example, but schedule actual delivery for a future time, would be helpful to end users, resellers and Carriers. The Moderator can facilitate such transactions by processing requests for end users or resellers (as buyers) for future telecommunications services to be delivered by Carriers. In order to provide the Moderator with sufficient information to process such a request, the buyer will enter the information describing the request on a software-derived template and transmit such information to the Moderator.

Detailed Description Text (62):

Bills may be rendered (a) on a retail basis to the end user or (b) on a wholesale basis to any local exchange carrier or intermediate switch-based carrier (or reseller of either) routing calls to a selected Carrier as a result of the bidding process described herein. Once a bill is prepared, it can be transmitted electronically (if the preparer or intended recipient wishes) by a computer associated with the preparer to a computer (or facsimile equipment) associated with the recipient or to an Internet website or database server from which the bill can be accessed and/or downloaded by the recipient. Provision can be made for the recipient of a bill to make payment electronically (using, for example, a credit card, debit card, prepaid account, or other payment arrangement) via such website or database server directly to each of the selected Carriers who provided billed telecommunications service to the bill recipient during the applicable billing cycle. As an alternative, the bill recipient could make payment electronically via such website or database server to the bill preparer, who would then process such payment, sorting the portion of such payment payable to each Carrier who provided telecommunication service to the billed recipient during the applicable billing cycle, and delivering those funds (for example, using electronic funds transfer means) to the respective Carriers. Applicable parts of each bill can also be transmitted by a computer associated with the bill preparer to a computer associated with each of the respective Carriers or to an Internet website or database server from which such parts of a bill can be accessed and/or downloaded by the respective Carrier.

Detailed Description Text (73):

FIGS. 25 and 26 illustrate an exemplary system for carrying out the herein disclosed forward delivery transaction process. A Buyer formulates an RFS and the Buyer's computer 135 transmits this RFS to the Moderator 137 over a data link or other telecommunications facility 136. In order to provide the Moderator with sufficient information to process the RFS, the Buyer enters the information describing the RFS on a software-derived template including, for example, the originating and terminating points or addresses of the route or route segment of the traffic to be carried. This template may reside, for example, on a computer bulletin board or website maintained by Moderator and accessible to Buyer.

Detailed Description Text (87):

Once the Moderator has selected a winning Carrier for the Buyer's RFS, the Moderator will transmit all or a portion of the transaction information to an Adjunct Computer 143 via data link or other dedicated or shared telecommunications facility 142. This Adjunct Computer 143 further processes the transaction information in order to provision the applicable Switch/Router 147 (i.e., the switch/router at which the Buyer's traffic will be routed to the winning Carrier's network) to execute the transaction (that is, to facilitate delivery in the context of a forward delivery purchase transaction) in accordance with the bidding process.

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L16: Entry 38 of 56

File: USPT

Jun 26, 2001

DOCUMENT-IDENTIFIER: US 6252951 B1

TITLE: Method and system for generating a billing record

Detailed Description Text (12):

Processor 126, in communication with the interface unit 124, processes the transaction data by a plurality of rate plans, each rate plan generating a toll amount corresponding to at least one telephone call. Processor 126 then compares the toll amounts from each of the plurality of rate plans to determine a lowest toll amount. Processor 126 deducts an amount x from the lowest toll amount to form a final toll amount, and generates the billing record for at least one of a plurality of subscribers based on the final toll amount.

Detailed Description Text (15):

FIG. 3 presents a block diagram representation of the operation of a processor in accordance with one embodiment of the present invention. In particular, the operation of processor 126 is represented. Processor 126 processes the transaction data by a plurality of rate plans 132, each rate plan 132 generating a toll amount corresponding to at least one telephone call. Processor 126 then uses comparator 134 to compare the toll amounts from each of the plurality of rate plans 132 to determine a lowest toll amount. Processor 126 uses summing block 136 to deduct an amount x from the lowest toll amount to form a final toll amount that can be used to generate the billing record for at least one of a plurality of subscribers based on the final toll amount.

Detailed Description Text (39):

While the term day of week has been used throughout description above, it should be recognized that telecommunication billing systems traditionally segregate days of the week only by the categories: holidays, Saturdays, Sundays, and other days of the week. However, more sophisticated segregation is possible as will be recognized by one of ordinary skill of the art.

CLAIMS:

1. In a network for providing telecommunication service to a plurality of network subscribers, a method of generating a billing record for at least one of the plurality of subscribers, the method comprising the steps of:

receiving a transaction record, the transaction record including transaction data corresponding to at least one telephone call placed by the at least one subscriber;

processing the transaction data by a plurality of rate plans, each rate plan generating a toll amount corresponding to the at least one telephone call;

comparing the toll amounts from each of the plurality of rate plans to determine a lowest toll amount;

deducting a constant value x, to form a final toll amount, wherein said constant value x is independent of the lowest toll amount; and

generating the billing record for the at least one of a plurality of subscribers based on the final toll amount.

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L16: Entry 38 of 56

File: USPT

Jun 26, 2001

US-PAT-NO: 6252951

DOCUMENT-IDENTIFIER: US 6252951 B1

TITLE: Method and system for generating a billing record

DATE-ISSUED: June 26, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Alcott; Scott P.	Oak Park	IL		
Linton; Thomas L.	Lake-in-the-Hills	IL		
Primo; Diane I.	Chicago	IL		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Ameritech Corporation	Hoffman Estates	IL			02

APPL-NO: 09/ 304944 [\[PALM\]](#)

DATE FILED: May 4, 1999

PARENT-CASE:

This application is a continuation of Ser. No. 08/846,155 filed Apr. 25, 1997 now U.S. Pat. No. 5,881,138 and continuation of Ser. No. 08/845,173 filed Apr. 25, 1997 now U.S. Pat. No. 5,920,613.

INT-CL: [07] [H04](#) [M](#) [15/00](#)

US-CL-ISSUED: 379/114; 379/112, 379/113, 379/119, 379/133

US-CL-CURRENT: [379/114.03](#); [379/119](#), [379/133](#)

FIELD-OF-SEARCH: 379/111-114, 379/133-134, 379/119, 379/120, 379/121, 379/127, 379/265, 379/266, 379/309, 379/34, 379/201, 379/207, 455/403, 455/405-406, 455/408

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> 4751728	June 1988	Treat	
<input type="checkbox"/> 4839916	June 1989	Fields et al.	
<input type="checkbox"/> 5027388	June 1991	Bradshaw et al.	

<input type="checkbox"/>	<u>5400395</u>	March 1995	Berenato	
<input type="checkbox"/>	<u>5420914</u>	May 1995	Blumhardt	
<input type="checkbox"/>	<u>5425084</u>	June 1995	Brinskele	
<input type="checkbox"/>	<u>5425085</u>	June 1995	Weinberger et al.	
<input type="checkbox"/>	<u>5481604</u>	January 1996	Minot	
<input type="checkbox"/>	<u>5515425</u>	May 1996	Penzias et al.	5/196
<input type="checkbox"/>	<u>5519769</u>	May 1996	Weinberger et al.	
<input type="checkbox"/>	<u>5553124</u>	September 1996	Brinskele	
<input type="checkbox"/>	<u>5553131</u>	September 1996	Minervino, Jr. et al.	
<input type="checkbox"/>	<u>5570417</u>	October 1996	Byers	
<input type="checkbox"/>	<u>5881138</u>	March 1999	Kearns et al.	379/114
<input type="checkbox"/>	<u>5920613</u>	July 1999	Alcott et al.	379/114

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
WO 96/32806	October 1996	WO	

OTHER PUBLICATIONS

Advertisement from McLeod USA Businesses Services, pages: Table of Contents, 1-11, and 14 (Rev. Feb. 1997).

Advertisement from Touch 1, Inc., 13 pages (1995).

ART-UNIT: 263

PRIMARY-EXAMINER: Nguyen; Duc

ATTY-AGENT-FIRM: Brinks Hofer Gilson & Lione

ABSTRACT:

A transaction record is received including transaction data corresponding to at least one telephone call placed by a subscriber. The transaction data is processed by a plurality of rate plans, each rate plan generating a toll amount corresponding to the telephone calls of the transaction record. The toll amounts from each of the plurality of rate plans are compared to determine a lowest toll amount. An amount x is deducted from the lowest toll amount to form a final toll amount. A billing record is generated for the subscriber based on the final toll amount.

1 Claims, 7 Drawing figures

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L16: Entry 40 of 56

File: USPT

Jul 13, 1999

DOCUMENT-IDENTIFIER: US 5923741 A

TITLE: Flexible system for real-time rating of telecommunications transactions

Brief Summary Text (5):

Although the distinction between local and non-local services has changed its shape in these days of integrated networks and national coverage, the distinction between services "manufactured" by the local carrier versus those resold from another carrier remains. Furthermore, the rating of combination of local/non-local telecommunications transactions by the local carrier will continue. Hence, rating systems used by local carrier preferably continue to accommodate non-local transaction processing. Additionally, changes in the market, in customer billing preferences, and in business models of local carriers, present a need for rating system flexibility, such that the carrier can unilaterally modify input parameters and rating behavior without interaction with the rating system vendor.

Detailed Description Text (3):

FIG. 1 depicts an input data structure derived from a data message defining a telecommunications transaction. The input data structure in the preferred embodiment includes fields for a structure version number, an origin telecommunications number (e.g., a phone number), a destination telecommunications number, a billing telecommunications number, a charge direction, a charge time, a service type, a local carrier, a local carrier service ID, a non-local carrier, a non-local carrier service ID, an international carrier, an international carrier service ID, a local pricing switch, a mileage calculation switch, and an array of pointers to input functions (Accessor Functions). In a preferred embodiment, this array is large enough to hold 30 pointers to functions.

Detailed Description Text (9):

If each element of the secondary selection criteria is satisfied by resulting data values of the input functions the rating system program has found a match for the telecommunications transaction it is processing. If so, the system uses the rate table indicated by the rate table ID SAID, in this case `2`, to obtain rating information for this transaction. It should be noted that in this embodiment, the rate table ID SAID indicates a set of rating tables corresponding to rate table ID SAID 2.

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L16: Entry 40 of 56

File: USPT

Jul 13, 1999

US-PAT-NO: 5923741

DOCUMENT-IDENTIFIER: US 5923741 A

TITLE: Flexible system for real-time rating of telecommunications transactions

DATE-ISSUED: July 13, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wright; Carl A.	Ypsilanti	MI	48198-9426	
Glesner; Becky L.	Ypsilanti	MI	48198-9426	

APPL-NO: 08/ 832881 [\[PALM\]](#)

DATE FILED: April 4, 1997

INT-CL: [06] [H04](#) [M](#) [15/00](#)

US-CL-ISSUED: 379/114; 379/119, 379/121, 455/405

US-CL-CURRENT: [379/114.01](#); [379/114.1](#), [379/114.12](#), [379/119](#), [455/405](#)

FIELD-OF-SEARCH: 379/112, 379/114, 379/115, 379/116, 379/119, 379/120, 379/121, 379/127, 455/405, 455/406, 455/407

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	4726056	February 1988	An et al.	379/115
<input type="checkbox"/>	5148472	September 1992	Freese et al.	379/59
<input type="checkbox"/>	5185785	February 1993	Funk et al.	379/111
<input type="checkbox"/>	5291543	March 1994	Freese et al.	379/59
<input type="checkbox"/>	5301223	April 1994	Amadon et al.	379/58
<input type="checkbox"/>	5488655	January 1996	Hamlen	379/114
<input type="checkbox"/>	5517555	May 1996	Amadon et al.	379/59
<input type="checkbox"/>	5519769	May 1996	Weinberger et al.	379/112
<input type="checkbox"/>	5528585	June 1996	Cooley et al.	370/56
<input type="checkbox"/>	5633919	May 1997	Hogan et al.	379/115

<input type="checkbox"/>	<u>5687223</u>	November 1997	Elliot et al.	379/115
<input type="checkbox"/>	<u>5719926</u>	February 1998	Hill	379/114

ART-UNIT: 273

PRIMARY-EXAMINER: Loomis; Paul

ATTY-AGENT-FIRM: Gifford, Krass, Groh, Sprinkle, Anderson & Citkowski, PC

ABSTRACT:

Methods and apparatus facilitate rating of telecommunications transactions and allow modification of the rating process without requiring reprogramming of the rating system program. An input data structure includes pointers to functions that return internally or externally derived data values to the rating system program. By virtue of a system of selection criteria and selection rules, the rating system program evaluates telecommunications transaction characteristics to obtain appropriate rating data for the transaction and to calculate charges based on this rating data.

11 Claims, 10 Drawing figures

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L16: Entry 52 of 56

File: USPT

Jun 29, 1993

DOCUMENT-IDENTIFIER: US 5223699 A

TITLE: Recording and billing system

Detailed Description Text (8):

Still referring to FIG. 3, a telecommunications billing system illustrated therein enables a plurality of telephones, such as telephone 301 to make credit card telephone calls using credit card 100 of FIG. 1. Telephone 301 is connected to a local exchange carrier (LEC) operator switch 302 located in a central office serving that telephone. When an authorized user of credit card 100 desires to place a call, the second code and the PIN common to the first and second codes assigned to that user may be communicated to switch 302 in several ways. First, if the telephone is equipped with an automatic card reader, the user may insert the card in a slot or opening in the phone, so that information encoded in information area 201 may be extracted and transmitted via the telephone lines to switch 302. A magnetic stripe reader may be used for this purpose, provided that it is adapted to extract encoded information in track 1. During the access process, the caller is prompted to enter his/her PIN, which is usually input using the telephone keypad. Alternatively, the initiation of a telephone call may connect the user to an automatic voice response unit (ARU), such as a Conversant 2 interactive voice unit, which prompts the user to enter the second authorization code and the PIN into the network using the touch tone keys available in the telephone set. Finally, in some instances, the user may communicate the second authorization code and PIN to an operator, who will then enter the information into the network using an interface terminal located in the central office.

Detailed Description Text (19):

With respect to PIN initiation, a request for a PIN assignment is received in processor 360, which uses both the first and second authorization codes to determine a common "valid natural PIN" that meets the limitations and criteria set by both the telecommunications network provider as well as the goods/services/cash providers that are processed in transaction clearing house 353. This PIN is transmitted to, and stored in encrypted form in customer database 385. Processor 360 also sends a "new card request" to network billing processor 330 which edits the request and returns any rejects, via reject file 333, to processor 360 for correction. Verified requests, that is, requests for a PIN that have been validated, are transmitted to account database 337 for storage in an encoded format. Concurrently, the first authorization code and the PIN are added to BVA database 304.

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L16: Entry 52 of 56

File: USPT

Jun 29, 1993

US-PAT-NO: 5223699

DOCUMENT-IDENTIFIER: US 5223699 A

TITLE: Recording and billing system

DATE-ISSUED: June 29, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Flynn; Lorraine	Somerset	NJ		
Oldakowski, Jr.; Chester J.	Annandale	NJ		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
AT&T Bell Laboratories	Murray Hill	NJ			02

APPL-NO: 07/ 608770 [\[PALM\]](#)

DATE FILED: November 5, 1990

INT-CL: [05] G06K 5/00, G06F 15/00, H04M 11/00

US-CL-ISSUED: 235/380; 364/406, 379/91, 379/144

US-CL-CURRENT: [235/380](#); [379/114.19](#), [379/91.01](#), [705/18](#), [705/26](#)

FIELD-OF-SEARCH: 235/380, 364/401, 364/406, 364/408, 379/114, 379/144, 379/91, 358/84

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	4001550	January 1977	Schatz	235/379
<input type="checkbox"/>	4162377	July 1979	Mearns	179/18D
<input type="checkbox"/>	4346442	August 1982	Musmanno	364/408
<input type="checkbox"/>	4472626	September 1984	Frid	235/380
<input type="checkbox"/>	4707592	November 1987	Ware	235/380
<input type="checkbox"/>	4791640	December 1988	Sand	379/114
<input type="checkbox"/>	4831245	May 1989	Ogasawara	235/380

<input type="checkbox"/>	<u>4851650</u>	July 1989	Kitade	235/380
<input type="checkbox"/>	<u>4891503</u>	January 1990	Jewell	235/380
<input type="checkbox"/>	<u>4907257</u>	March 1990	Asano et al.	235/380
<input type="checkbox"/>	<u>4935756</u>	June 1990	Hellwarth et al.	379/114

ART-UNIT: 251

PRIMARY-EXAMINER: LaRoche; Eugene R.

ASSISTANT-EXAMINER: Glembocki; Christoher R.

ATTY-AGENT-FIRM: Freedman; Barry H.

ABSTRACT:

Each potential user of a telecommunications network is assigned a single credit card containing at least first and second authorization codes, the first code being indicative of status as an authorized user of the telecommunications network and the second code being indicative of status as an authorized purchaser of goods and/or services, as in a conventional credit card. The authorization codes are preferably contained on the card in both human readable form, such as embossed lettering, and in machine readable form, such as magnetic encoding. The validity of the first authorization code is verified to permit access to the telecommunications network. After the telecommunications network has been used to complete a call, billing information including the first billing code that has been recorded locally is transmitted via the telecommunications network to a remote data base in which the second billing code associated with the first billing code is automatically determined in data processing equipment. The processor assembles conventional goods/services related transactions (including cash access transactions at Automated Teller Machines) and complete telecommunications usage information into a combined electronic record, so that a single bill can be rendered to the user.

8 Claims, 5 Drawing figures

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Using default format because multiple data bases are involved.

L37: Entry 1 of 1

File: USPT

Jul 1, 2003

US-PAT-NO: 6587691

DOCUMENT-IDENTIFIER: US 6587691 B1

TITLE: Method and arrangement relating to mobile telephone communications network

DATE-ISSUED: July 1, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Granstam; Bo	K.ang.llered			SE
Gabinus; Tomas	Goteborg			SE

US-CL-CURRENT: [455/457](#), [455/524](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachments	Claims	KWIC	Draw D
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Terms	Documents
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